A COMPARATIVE ANALYSIS OF USERS AND NON USERS OF ICT SERVICES IN LIBRARIES WITH SPECIAL REFERENCE TO HIGHER EDUCATIONAL INSTITUTIONS OF AGRA

A

SYNOPSIS

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1. INTRODUCTION:

The twenty first Century has been characterized as the knowledge or information society. Institutions of higher education form the store house of knowledge creation, dissemination, and transfer. Libraries are the major source of information and knowledge. Libraries have been in existence since the inception of the civilization in one or the other form. Even in the ancient days social reformers of different regions and periods always thought and strived to establish a library for the preservation and development of their culture. Libraries are social institutions, which play a crucial role in the societal development.

In a world that is information rich, information can be said to be human mind in action and libraries are the strong forces for learning. Libraries are integral part of education system of a society. Libraries play a positive role for students and learners in their enrichment of knowledge and mental development, ultimately leading to national development. The general library and information services scene is changing fast in the face of new challenges of globalization. Through Information Communication Technology (ICT), information is transmitted from one place to another within few seconds. Communication networks are there to handle digital machine communication and satellites to transmit such implementation and data.

Over a period libraries are being transformed from use of books to use of ICT. The government of India has been making significant investment to increase student's access to ICTs. The ICT includes any communication device or application including radio, television, cellular phones, computer and network hardware and software, satellite systems and so on and various services associated with them. Such as video conferencing and distance learning. When such technologies are used for educational purposes to support and improve the learning of students, ICT can be considered as a

subfield of educational teaching ICT in higher education are being used for developing course material, developing and sharing content communication between learners, teachers and the academic world.

The national mission on education through Information and Communication Technology (NMEICT) is envisaged as a centrally sponsored scheme to leverage the potential of IT/ ICT in teaching and learning process for the benefit of all the learners in higher education institution in any time any where mode content generation and connectivity along with provision for access devices for institution and learners one the major components of the mission. (IT/ICT Adoption in Indian Higher Education calsoftlabs.com) XII plan incorporates strengthening national mission on use of ICT as its key initiative

1.1 HIGHER EDUCATION IN INDIA:

India has significant advantages in the 21st century knowledge race. India has one of the largest higher education system in the world, after China and the United States. with 259 million students enrolled in more than 45,000 degree and diploma institutions in the country (Executive Summary, XII F Y P) There are 659 universities, 33, 023 colleges and 25.9 million students enrolled in H E l s in India during 2011-2012

The purpose of education is well-rounded development. Students need a combination of arts, computer science, science, and humanities or literature courses to achieve this kind of development. A well-equipped and well-managed library is the foundation of modern educational structure. It is said that education without library services is like a body without soul, a vehicle without an engine, and building with bricks but no cement. Formal education can be conducted effectively and efficiently only with well-equipped libraries. Today libraries of educational institutions are growingly connected to vast ocean of Internet-based services.

The growth rate of educational institutions in India was slow before independence in 1947. At the end of X Five year Plan, there were 363 Universities (20 Central, 229

State, 109 Deemed and 5 Institutions under Special State Legislature Acts) and 21,170 colleges in the country. At the end of the third year of XI Plan (2009-10), the number of Universities has gone up to 493 (42 Central, 130 Deemed and 316 State Universities and 5 Institution established under Special State Legislature Acts) and the number of Colleges to 31,324, thus registering an increase of 36% in the number Universities and 48% in the case of Colleges in comparison to the figures at the end of X Plan Indian higher education system has expanded at a fast pace by adding nearly 20,000 colleges and more than 8 million students in a decade from 2000-01 to 2010-11.(Annual Report 20011-12, UGC)

Table 1: Type-wise number of University/University-Level Institutions and Colleges as on 31.03.2012

Sl. No.	Type of Institutions	Number of Institutions (As on 31.03.2011)	Number of Institutions (As on 31.03.2012)
1	Central Universities	40	42
2	State Universities	265	275
3	State Private Universities	60	90
4	Institutions established through State Legislation	29	33
5	Institutions Deemed to be Universities	128	130
	Total	522	570
6	Autonomous Colleges and Affiliated Colleges		31,324 (approx)

Source: Annual Report 20011-12, UGC

1.2 HIGHER EDUCATION IN UTTAR PRADESH

Uttar Pradesh has a total of 53 universities, the second-highest in all Indian states and union territories. The University Grants Commission (UGC) was established by an act of Parliament in 1956. It is an autonomous advisory organization for the promotion and co-ordination of university education and for the maintenance of standards. The UGC also directs higher education in Uttar Pradesh. Realizing the value of the library

and its role in higher education, the UGC accepted most of the recommendations of the several committees and commissions. UGC provides financial assistance for educational development, acquisition of books and periodicals, purchase of furniture and equipment, and construction of new library buildings and so on.

Table 2: As a Type-wise number of University/University-Level Institutions and Colleges as on 31.03.2012

Institution Type	Count
Central Universities	4
Deemed Universities	10
Private University	16
State Universities	23
Total	53 (approx)

Source: Annual Report 20011-12, UGC

1.3 USE OF ICT SERVICES IN LIBRARIES

Now the ICT has entered in every library including, higher educational institutions libraries. They may provide the following services with the use of ICT i.e. current awareness services, SDI services, circulation of new additions, electronic document delivery, multimedia services, CD/DVD based services, online data bases, web OPAC, library website, internet services, printing services, scanning services.

http://en.wikipedia.org/wiki/Higher Education

The background (Educational, Social and Economic) of users also plays an important role in the frequency of use of ICT. Many students have all ICT related facilities at their home from their childhood. These students use ICT frequently without any hesitation. The proposed study will examine above all the above issues and will identify reasons for the differences observed. An attempt will be made to suggest ways by which ICT usage will increase and existing differences in usage patterns will be reduced.

Computing technology, communication technology and mass storage technology are some of the areas of continuous development that reshaped the way that libraries access, retrieve, store, manipulate and disseminate information to users. Whether modern library services are helpful to them in handling the latest technologies and their need for further changing electronic environment of higher educational institutions in Agra.

2. STATEMENT OF THE PROBLEM

In present scenario use of information and communication technology in libraries and information centers has become very common. The development and access to digital information resources has raised a number of challenges for librarians. Information is a valuable resource in all types of libraries, but the ICT infrastructure that are important to create, collect, consolidate and communicate information are not yet well established in a majority of libraries. Even where ICT infrastructures are available their use is generally inadequate due to lack of appropriate skills among the students and library staff. Information can be represented as a vertical and non-interactive structure through which people communicate data, information or ideas to a large number of receivers. Most libraries, particularly higher educational institutions libraries, are switching over to ICT infrastructures at an accelerated pace. E-Journals, CD-ROM Databases, Online Data Bases, e-books, web based infrastructures and a variety of other electronic resources are fast replacing the traditional mode of information gathering in higher educational institutions libraries.

Use of ICT in higher education has become integral part of education; however variations in purpose and frequency its use are seen among students. This may depend upon various factors including existence of ICT equipped library, student's their socio-economic status, nature of subject studying of users and non- users of ICT services in libraries.

Despite government's initiative to achieve excellence in higher education and its investment in developing and supporting ICTs infrastructure in institutions of higher learning, it has been observed that all students do not have equal access to ICT.

Today, ICT acquisition and implementation is facing a lot of problems. Present research work will also be conducted to expose some of the inhibiting factors that are hindering the use of ICT in higher educational institutions libraries (on library personnel and users). Lack of search skills, automation at infancy level, consistent power supply, and technical know - how are some of the problems encountered by the higher educational institutions libraries in Agra. The present study is entitled as "A COMPARATIVE ANALYSIS OF USERS AND NON USERS OF ICT SERVICES IN LIBRARIES WITH SPECIAL REFERENCE TO HIGHER EDUCATIONAL INSTITUTIONS OF AGRA" will be carried out with the following objectives:

3. OBJECTIVES:

- To compare the socio-economic status of users and non-users of ICT services in higher educational institutions libraries in Agra.
- To study the purposes and frequency of use of ICT services by users.
- To evaluate the existing ICT infrastructure facilities in higher educational institutions libraries of Agra.
- To study the help and support given by library staff to students in the use of ICT services in libraries
- To find out the problems faced by the users and service providers of ICT services in higher educational institutions libraries.
- To suggest solutions to problems faced by the students and service providers of higher educational institutions libraries in Agra.

4. HYPOTHESES

- Students from higher socio-economic status make more use of ICT services than student of lower socio-economic status.
- Most users use ICT services for preparing their assignments, and frequency of use depend upon number of assignments
- Most higher educational institutions libraries do not have adequate ICT infrastructure facilities.
- Usually library staff do not render their help and support to students in accessing ICT services.
- Major problem faced by the users and services providers' is the non - acquisition of skills in ICT usage.

The above hypotheses are taken by the researcher as the objectives of the study.

5. SIGNIFICANCE OF THE STUDY

There are not sufficient studies conducted on the use of Information Communication Technologies services by the higher educational institutions students. Whereas it is important to evaluate the progress in ICT usage in these institutions. Hence, This study is relevant as at will assess the ICT usage and infrastructure in higher educational institutions libraries in Agra .

The study will also evaluate in status of ICT services in higher educational institutions libraries and to describe ways in which it is assisting higher educational institutions library personnel in attaining effective management as well as improving their service-orientation, staff development, organizational structure, and utilization of technology to meet the demands of their services. So the proposed study "A COMPARATIVE ANALYSIS OF USERS AND NON USERS OF ICT SERVICES IN LIBRARIES WITH SPECIAL REFERENCE TO HIGHER EDUCATIONAL INSTITUTIONS OF AGRA" constitutes an important area of study. It is hoped that the study will give an insight about the extent to which library services have been able to be abreast of the advances in information communication technologies. The study will be useful for policy makers.

6. METHODOLOGY

UNIVERSE:

All the students studying in institutions of higher education in Agra District will constitute the universe of our study.

SAMPLE:

Three stage random sampling method will be used. In 1st stage, 10% sample of faculties/ institutions will be drawn from one Deemed Universities (Dayalbagh Educational Institute), twenty six professional institutes, fifty four affiliated colleges of Dr. B. R. Ambedkar University, and seventeen departments and institutions of Dr. B. R. Ambedkar University, Agra.

In 2nd stage, List of all the departments of the selected faculties, institutes, and colleges will be prepared and 10% departments will be selected from each college/ faculty/institute.

In 3rd stage List of all the students of selected departments will be made and appropriate sample size will be drawn if required.

TOOLS OF DATA COLLECTION:

Interview- schedules and observation will be used as tool of collection of data.

SOURCES OF DATA

Primary —

Separate interview-schedules will be prepared for the proposed study; one for service providers and second for users.

Secondary — Data will be collected through books, journals, annual report of Institutes, UGC reports, government reports, internet, and website

7. REVIEW OF LITERATURE

Amritpal Kaur[1] Reveals the concept of "IT and marketing of library and information services". He described about information technology and marketing of library services and products and their impacts on Indian libraries and librarianship. Author also suggested the new ways of marketing of services of library. He highlights the concept of marketing, need for marketing for information and also described in a better way the marketing planning, marketing strategy for the libraries in modern age.

Jayaprakash and Nagabhushanam, (2013)[2]. Discusses the status of both the communication technology and the information production technology are undergoing rapid changes and their convergence has a great impact on academic libraries. This impact resulted in the form of digital library. It can be defined as a library having all the information available in digital form. The traditional library focuses on tasks but not on the needs of user community whereas digital library aims to create a customer focused, continuous learning, constantly improving, flexible quality based library. The purpose of digitization in higher education is to collect, store, organize and disseminate information rapidly worldwide form one end to the other and vice versa through the use of computer. This paper deals with different aspects of digital library in higher education. It is the analysis of the present scenario anticipation of a better future of academic digital library.

Cholin (2005)[3] Describes the application of information technology for effective access to resources in Indian university libraries. The author also describes that information technology has revolutionized the information handling activities in research and academic libraries in India. Indian universities constitute one of the largest higher education systems in the world.

1. Kaur, Amritpal. "IT and marketing of library and information services". Information management with IT application by K.C. Sahoo, ed. Ludhiana: Medellion Press. Pp. 240-246

2. Jayaprakash and Nagabhushanam, "Emergence role of digital libraries in higher education" Library progress International)Vol. 26 (No.1-2) Jan-June 2013

3. Cholin, Veeranna S. (Sep2005) Study of the application of information technology for effective access to resources in Indian university libraries.Intonation Information and library review; Vol. 37(No. 3), pp189-197.

It comprises more than 310 universities /institutions, 15,500 affiliated colleges, 10 million students with 5 lakhs teachers. The university libraries in India are at various stages of development in the application of information technology tools in their day-to-day activities. INFLIBNET an inter university centre of University Grants Commission has undertaken the task of providing assistance to university libraries across the country through its number of initiatives education systems in the world.

Latha and Nagarajan (2010)[4] Show that the use of ICT and resources is very common among scientists and research scholars of special libraries and majority of the scientists and research scholars are dependent on ICT and e-resources to get the desired and relevant information. But in practice use of e-resource is not up to the mark in comparison to investments made in acquiring these resources. They also stated that infrastructure and training programs should also be revised as per requirements of the modern times. It is also observed by the authors that the availability of e-resource in the special libraries is almost sufficient for all the existing disciplines but the infrastructure to use these resources is not adequate and can hinder the ability to meet the requirements of users.

Handa (2010)[5] Highlights the impact of IT on management aspect to available source actual state of engineering college libraries with respect to administrative set up method of book selection and acquisition, technical process, reference, circulation services, physical facilities and personnel management. Authors say that improved include the collection development policy and extent of IT application in providing effective library services. The authors focus on the current problems and improving services in electronic environment. To collect the opinion regarding the computerization of library services and gather information about the needs for information and library services with the help of IT

4 Latha, J. K. & Nagarajan, M. (2010) Users and their usability assessment of ICT & e-resource in special libraries (Tamil Nadu):An overview Library Progress (International) Vol.30 (No.1),pp. 23-31

5. Handa, Tarvinder Singh (2010) Evaluation of management and services of engineering college libraries affiliated to panjab technical university: A surve ILA Bulletin Vol.32 (No 3-4) pp.5-12

Sinha (2011)[6] Discusses the status of information and communication technologies awareness of university and teachers of north eastern region of India. The study highlights the extent of ICT awareness availability of ICT at colleges and universities under study and the suggestions put forwarded by the respondents for the improvement of the existing ICT in the college and universities of north eastern state of India. The paper highlights the important survey finding in respect of ICT awareness and infrastructure, training in the college and universities of north eastern states of India.

Vasishta (2012)[7] Explains that modern technology has radically altered the nature of our society and style of working of the people. Library and information services behind the screen also require changing to the tune of the progress of the civilization, keeping in view the requirement of time, technological developments and global change.

Devendra and Nikam (2012)[8] The paper focuses an overview of online public access catalogue (OPAC) and law universities in Karnataka state. The aim of the study is to learn about OPAC users affirmative perception, post affirmative perception and level of satisfaction with library OPAC research. This paper highlight with the user perception towards the use of OPAC in law university libraries in Karnataka. The conclusion of this paper that users have different level of perceptions with regard to OPAC search. This research paper produces finding of relevance to any law universities library to develop and implement a user oriented or user friendly OPAC services.

6. Sinha, Manoj Kumar(2011) Information and communication technology awareness amongst university and college teachers of north eastern region of India: A survey Library progress (International) Vol. 31 (No. 2) pp.217-234

7. 7.Vasishta, Seema. (2012). ICT and librarians: surviving the challenges of the technological development. Journal of Indian library association Vol.48 (No. 2) pp. 36-40

8. **Devendra and Nikam(2012)** OPAC and user perception in low university libraries in Karnataka: A study., International Journal of Information Dissemination and technology, Vol. 3 (No. 4) OCT-DEC 2012

Ajit Mondal (2012)[9] The paper highlight of ICT in higher education, Quality, Accessibility in ICT. Focuses the impact of increasing of ICTs in the higher education has profound implications for the whole education process especially in dealing with key issues of access, equity, management, efficiency, pedagogy and quality. The increasing use of information and communication technologies (ICTs) has brought changes to teaching and learning at all levels of higher education systems (HES) leading to quality enhancements. Traditional forms of teaching and learning are increasingly being converted to online and virtual environments. There are endless possibilities with the integration of ICT in the education system. The use of ICT in education not only improves classroom teaching learning process, but also provides the facility of e-learning. ICT has enhanced distance learning.

Sylvia Hogaryh (2006)[10] The focus of the study is one that is very relevant to the increased use of ICT in science teaching and learning. The issue of the effectiveness and impact of ICT in the core curriculum subjects is important. In science, Teachers will also need training in the use of the simulations to obtain the greater benefit for student understanding. In particular, this review has shown that the use of ICT simulation needs to be carefully integrated into the teaching and learning process, and informed guidance provided. This guidance may be built into the software so that the students may work semi-independently or it may be provided by the teacher. However, teacher guidance is the more effective. This has implications for policies for initial teacher training and continuing professional development.

9. Ajit Mondal (2012) ICT in Higher Education: Opportunities and Challenges University of Kalyani, West Bengal.

10. Sylvia Hogaryh (2006) ICT in Science Teaching, Technical Report No. 1412 T (Nov 2006)London

TENTATIVE CHAPTERIZATION

CHAPTER-1 Introduction

CHAPTER-2 Socio-economic Status of Users and Non-users.

CHAPTER-3 Purposes and Frequency of ICT Usage by Students.

CHAPTER-4 Status of ICT infrastructure in Higher Educational Institutions Libraries in Agra.

CHAPTER-5 Problems and Solutions in Using ICT Services.

CHAPTER-6 Findings and Conclusions.

CHAPTER-7 Suggestions and Recommendations

Bibliographies and References

Appendix (Questionnaires)

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12. http://en.Wikipedia.org/wiki/higher education.